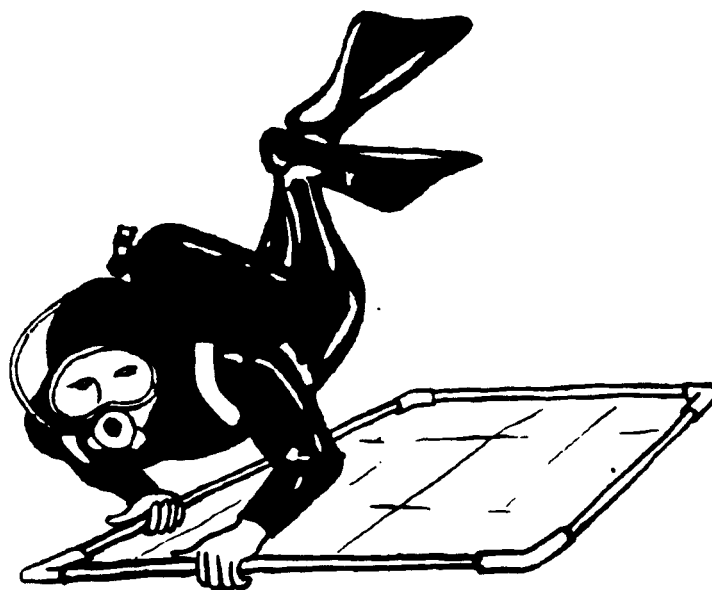


Training the Next Generation of Marine Scientists

Video Review Workbook



By Cheryl Rosenfeld

Introduction

Each year for the past decade Marine Option Program (MOP) students have attended the Quantitative Underwater Ecological Surveying Techniques (QUEST) Workshop. In May 1991 the workshop became an accredited annual course.

During the workshop students undergo training in underwater survey methodology; transect line deployment, use of quadrats, estimation of fish biomass, underwater still-camera and video-camera documentation and analysis of collected data.

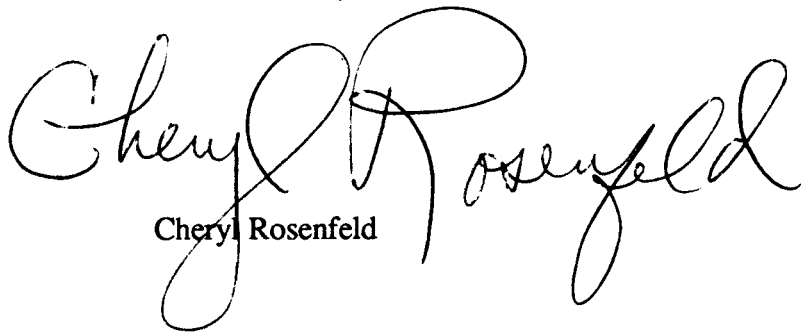
The video you are about to watch, *Training the Next Generation of Marine Scientists*, will provide new and potential QUEST participants visual and concrete images of the techniques presented at the workshop. In addition, the production can be used as a promotional or instructional tool for future QUEST workshops.

The attached exercises will provide a basic understanding of transecting equipment and its uses. Please take the time to read through this booklet before viewing the video.

Page two (2) should be filled out while viewing the video, *Training the Next Generation of Marine Scientists*. The questions on pages three (3) and four (4) should be answered after watching the video. When you are finished, please give the workbook to your MOP coordinator

Enjoy the video and good luck.

With Aloha,



Cheryl Rosenfeld

<u>EQUIPMENT</u>	<u>USE/FUNCTION</u>	<u>NOTES</u>
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Quadrat

Still Camera

Video Camera

Transect Line

Computer

Slate

POST VIDEO QUIZ

1. Which equipment would you use to estimate percent cover of invertebrates?
2. Which surveying methods require the use of a transect line?
3. What four pre-workshop certifications are necessary to participate in QUEST?
4. What is the benefit of using cameras for transect work versus standard manual collection?
5. How long is the QUEST workshop at the University of Hawaii-Hilo?
6. Is the workshop composed of only diving activities?
If not, what other activities are included?
7. What can QUEST graduates do with their newly acquired skills?
8. How many data points are there on a standard one-meter square quadrat?
9. What is the purpose of the QUEST workshop?
10. Do you feel that QUEST will enhance your academic and career goals?

Video Evaluation

1. Did the video answer your questions about QUEST?
2. Were any of your questions left unanswered?
3. Does the video clearly present the objectives of the QUEST workshop?
4. Do you feel that with training you are capable of performing the skills described in the video?
5. Was the video too long or too short?
6. Does the video peak your interest in attending the QUEST workshop?
7. What did you like about the video?
8. What did you dislike about the video?
9. Do you have any comments about how to improve the video?
10. Would you recommend this video to other potential participants of QUEST?

Helpful References

- Brock, R.E. 1982. A Critique of the Visual Census Method For Assessing Coral Reef Fish Populations. *Bulletin Marine Science* 32:269-276.
- Brock, V.E. 1954. A Preliminary Report on A Method of Estimating Reef Fish Populations. *Journal Wildlife Management* 18:297-308.
- Coyer, J. and Witman, J. 1990. *The Underwater Catalog: A Guide to Methods in Underwater Research.* Shoals Marine Laboratory, Ithaca, New York
- Dudley, W. and Hallacher, L. 1991 QUEST Schedule and Program. University of Hawaii Hilo Marine Option Program.
- Maynard, S.D. 1984. An Undergraduate Marine Internship and Activities Program for the University of Hawaii System. *Proceedings of Oceans '84*:820-824.
- Maynard, S.D. and Saint, G. 1988. Underwater Transect Training By the University of Hawaii Marine Option Program.
- Reed, S.A. 1980. Sampling and Transecting Techniques on Tropical Reef Substrates. pp. 71-89. In: *Environmental Surveying Techniques for Coastal Water Assessment Conference Proceedings.* University of Hawaii Sea Grant College Program, Cooperative Report UNIHI-SEA GRANT-CR-80-01.